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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,058	02/20/2004	Chung-Wen Ko	250122-1240	6848

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EXAMINER

LIE, ANGELA M

ART UNIT PAPER NUMBER

2821

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/784,058

Applicant(s)

KO, CHUNG-WEN

Examiner

Angela M. Lie

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/20/2004, 03/28/2005</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over May (US 6211613) in the view of Van Order (US 6247820).

As to claim 1, May teaches an electroluminescent display comprising: a transparent display panel (Figure 1, elements 12,4 and 2), a reflective sheet (Figure 1, element 10). May does not disclose a brightness regulating film for light transmission between the transparent display panel and the reflective sheet. Van Order teaches electro-optic medium placed between two electrodes (Figure2, elements 19, 15 and 17), where it is used to change light transmissivity (column 3, lines 26-29 and lines 46-48). It would have been obvious to one of the ordinary skill in the art during the time when the invention was made to incorporate electro-optic medium placed between two electrodes, as taught by Van Order into May's organic electroluminescent display, because this allows to keep a high contrast of displayed image regardless of ambient light intensity.

As to claim 2, May and Van Order teach all the limitations presented in claim 1. May also teaches the display wherein the transparent display panel comprises: a transparent substrate (Figure 1, element 12), a first transparent electrode over the

transparent substrate (Figure 1, element 4), a light emitting layer over the first transparent electrode (column 6, lines 22-26), a second transparent electrode over the light emitting layer (Figure 1, element 2).

As to claim 3, May teaches the display wherein the light-emitting layer is an organic electroluminescent film (column 6, lines 21-26).

As to claim 4, Van Order teaches the display wherein the brightness regulating film is an optical slit (Figure 2, element 15) to control light transmission from the environment (column 3, lines 46-48).

As to claim 5, Van Order teaches the display wherein the brightness regulating film is made of electrochromic material (column 7, lines 39-40) or liquid crystal (column 7, lines 41-43) capable for controlling light transmission thereon by adjusting current applied thereto (column 3, lines 44-48, Van Order teach using a control voltage to control transmission of the medium, however current and voltage are related, therefore controlling voltage also leads to controlling current).

As to claim 6, Van Order teaches the display further comprising a photo sensor (column 3, lines 48-49) to detect light intensity of the environment (column 1, lines 43-44).

As to claim 7, Van Order teaches the display wherein the brightness regulating film adjusts the light transmission intensity from the environment according to a light intensity of the environment detected by the photo sensor (column 1, lines 41-44).

As to claim 8, Van Order teaches the display wherein the brightness regulating film (Figure 2, element 15) adjusts a light-transmitting mode thereof by controlling

current intensity applied thereon (column 3, lines 46-48, since voltage and current are related, controlling voltage leads also to controlling current) according to a light intensity of the environment as detected by the photo sensor (column 1, lines 43-44).

***The Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US 6239898 discloses the electrochromic structure
- US 20040262614 discloses bistable display having a photodetector
- US 20040031966 discloses the organic photonic integrated circuit using a photodetector and a transparent organic light emitting device.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2821

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Don Wong  
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